

# **Management Committee Meeting Summary**

April 25, 2018 9:30 am – 12:30 pm Executive Office of Energy and Environmental Affairs 100 Cambridge Street, Room 2A, Boston

## **Attendees:**

Management Committee

Julia Blatt (Massachusetts Rivers Alliance [MassRivers])

Jon Grabowski (Northeastern University Marine Science Center [NUMSC])

Steve Kirk (The Nature Conservancy [TNC])

Georgeann Kerr (MA Division of Ecological Restoration [DER])

Regina Lyons (U.S. Environmental Protection Agency [EPA])

Rebecca Newhall (National Oceanic and Atmospheric Administration [NOAA])

Julie Simpson, (MIT Sea Grant) [STAC Chair]

Kristin Uiterwyk, Chair (Urban Harbors Institute [UHI])

Colin Van Dyke, Vice Chair (Anderson-Krieger)

Samantha Woods (North and South Rivers Watershed Association [NSRWA])

## Coordinators and Staff

Pam DiBona (MassBays, Executive Director)

Prassede Vella (MassBays, Staff Scientist)

Barbara Warren (SSCW, Lower North Shore Regional Coordinator)

Sara Grady (NSRWA, South Shore Regional Coordinator)

Carole McCauley (NUMSC, Metro Boston Regional Coordinator)

Jo Ann Muramoto (APCC, Cape Cod Regional Coordinator)

Peter Phippen (MVPC, Upper North Shore Regional Coordinator)

## Other Attendees

Cyndi Gonzales (Pacer Strategies)

Meridith Timony (EPA Region 1)

## Welcome and Introductions

Committee Chair Kristin Uiterwyk opened the meeting and welcomed the attendees. After introductions and review of the agenda, she introduced Committee business.

## **Committee Business**

**Nominating Subcommittee:** Samantha Woods presented Steve Kirk as the incoming representative of The Nature Conservancy. Following a motion by Colin, seconded by Julie, the Committee confirmed Steve as a new Committee Member. Steve is TNC's Massachusetts Coastal Program Manager, and works on nearshore restoration projects and state and regional coastal conservation.

*Finance Subcommittee:* Colin Van Dyke reported that the Subcommittee convened for conference calls to address the subcommittee's goal of attracting new and additional dollars for MassBays' work, without competing with partners' fundraising efforts. He noted that Andrew Gotlieb was seeking sponsors for an item in the state Environmental Bond Bill to provide matching funds for MassBays' grant from EPA. Colin, Pam, and Margherita Pryor were investigating the possibility of partnering with Restore America's Estuaries as a conduit for private funding.

**Science and Technology Advisory Subcommittee:** Julie Simpson updated the Committee on progress toward setting target conditions for MassBays embayments. She reported that a NUMSC team led by Jon Grabowski carried out significant work and statistical analysis of existing data to facilitate applying a Biological Condition Gradient approach for target-setting (endorsed by the Committee at the October 2017 meeting). Next steps will be to work with the Subcommittee and regional stakeholders to describe desired conditions in the embayments.

Communications and Outreach Subcommittee: Kristin described the process implemented to solicit and review proposals for developing a strategic communications plan in response to the Program Evaluation findings. After an open call and bidding process, a review committee selected Pacer/Strategies to develop the plan. Company principal Cyndi Gonzales described her plan for developing useful guidance for MassBays' outreach efforts, which will include examining MassBays' current communications efforts, identifying gaps, and developing creative ways to tell MassBays' story to specific audiences, including potential funders. She will interview all Regional Coordinators (RCs), EPA Region 1, the Management Committee Chair and Vice Chair, and the Subcommittee members. Others are invited to contact Cyndi with any insights regarding MassBays' external communications, especially outreach to new and diverse audiences (Cyndi@pacerstrategies.com).

The final plan (due October 31) will be brought to the Management Committee for review prior to submission as an attachment to MassBays' final Comprehensive Conservation and Management Plan (CCMP).

# **Workplan Update**

Pam reminded the group that the Federal Fiscal Year 2018 Workplan (July 1 2018 to June 30 2019) and report on accomplishments for FFY 2017 (July 1 2018 to June 30 2018) is due to EPA in early July. She will provide an electronic copy for review and endorsement at the end of June.

Meanwhile, Central Staff will meet with the RCs to determine tasks for this year. A new contracting arrangement (Cooperative Agreements) means that the scopes of work can be developed collaboratively and with a view across the regions. For the past several years the contracts have been awarded via a competitive grant process which prohibits discussion about the actual scopes of work prior to awards. Regarding the CCMP, Pam shared her recommendation that the revised document should acknowledge and address environmental justice concerns, in the same way that climate change is included – as an undercurrent to all planning and outreach. For example, programs presented by the RCs should take into account accessibility to diverse audiences with regard to language, cost, and child care services. The Committee agreed that the CCMP revision provides a good opportunity to call out inequitable access to resources and vulnerability to adverse impacts. Future Committee meetings will explore this issue in more detail.

# Water quality investigations in the Lower Merrimack River Meridith Timony, EPA Region 1

EPA Scientist Meridith Timony <u>presented</u> an overview of EPA's work (with contributions from MassBays and CZM staff) to characterize conditions in the lower Merrimack River (slides available at ). The Merrimack is the greatest source of freshwater input to the MassBays planning area, yet no consistent water quality (or other environmental) monitoring is in place. EPA collects data regarding discharges, but not ambient (water column) water quality data. This is a recognized data gap for MassBays' efforts to characterize conditions and trends in the Bays.

With a drainage area exceeding 5,000 square miles, the Merrimack supports important ecological resources and a diverse biological community. The river offers various uses including recreational activities, generation of hydropower, and drinking water for various communities. High intensity development in its watershed generates high volumes of waste water and stormwater discharge. Although there are several waste water treatment plants, larger cities have CSOs.

In spite of numerous point and non-point sources that are impacting the waters of the river down to the estuary, there is a lack of water quality data in the Lower Merrimack River which extends from Haverhill down to Newburyport and Salisbury on the estuary. This is largely due to a lack of an ongoing monitoring program that collects data to inform the issuing of discharge permits.

Between 2013 and 2016, the US Army Corps of Engineers (USACE) and CDM Smith conducted water quality monitoring from a large number of stations. However, the yearly sampling does not generate a robust dataset in the estuarine section of the river.

In 2017 EPA and CZM/MassBays collaborated on a project to monitor the Lower Merrimack River from Lawrence, MA to Salisbury, MA. Water quality data from the tidal section of the river will be used primarily to track conditions in the river. Results will also inform issuing discharge permits and will be used by entities such as DEP and MassBays to support assessments and report development required under the Clean Water Act. Monthly discreet and YSI (instantaneous and continuous) water samples were collected between June and October from 6 stations (based on USACE data) along a salinity gradient, on outgoing tide. In addition, sondes were deployed on buoys to gather continuous data. Details are provided in the slides and the report is available upon request.

Based on the 2017 results, some minor modifications will be made in the 2018 season including to capture data from Joppa Flats (Newburyport, MA) and also to capture CSOs since no elevated measures could be distinguished on wet days.

## Q&A

- Q: Are any farms in the watershed? A: Meridith is not aware of any large-scale farms.
- Q: Are any watershed associations involved in the effort? A: Primarily upstream, no one has really been monitoring in the lower river consistently. Gulf of Maine Institute (high school students) and the Merrimack River Watershed Council have sampled in the past.
- Q: How far upstream does the salt wedge reach? A: Haverhill
- Q: Has there been variability in water quality at each site? A: Yes
- Q: Has EPA observed any trends from upstream to downstream? A: Day-to-day trends, but not over longer time periods yet.
- Q: Could nutrients be entering the river from groundwater, similar to Cape Cod? A: We think that phenomenon is specific to the Cape.
- Q: Can permitted discharge limits be set without a TMDL for the lower watershed? A: A TMDL would be useful, but currently there are no data for nitrogen concentrations in the water column, only in discharges, and there are currently no limits on smaller discharges.
- Q: Have there been any observed adverse impacts of those discharges? A: No algal blooms, for example good flushing helps.

## **Management Committee Member Updates**

<u>The Nature Conservancy</u>: (1) TNC is working on two oyster restoration projects in Bourne, one in Wareham, both focused on oyster reefs as habitat and means for water filtration. These efforts are part of an organization-wide goal of increasing shellfish populations in coastal waters. (2) With funding from the National Fish and Wildlife Foundation, TNC is working with EEA on a statewide plan for aquaculture and fisheries.

NOAA: (1) MyCoast (<a href="https://mycoast.org/ma">https://mycoast.org/ma</a>) photos of storm damage and flooding were used to justify NOAA investment into emergency response for Massachusetts, and future aerial observation will be directed toward hot spots. Thanks to the RCs, Staff Scientist, and others for their contributions to that database. (2) NOAA's Green Infrastructure database (part of digital coast website) includes resources regarding living shorelines (as does TNC's <a href="https://www.naturebasedsolutions.org">www.naturebasedsolutions.org</a>). (3) Remember that NOAA provides online training materials, also at <a href="https://coast.noaa.gov/digitalcoast/">https://coast.noaa.gov/digitalcoast/</a>

<u>MassRivers</u>: EPA has determined that Massachusetts' NPDES permitting program will remain with Region 1 (Massachusetts had applied to bring the program in-house to DEP). DEP's budget was increased

in the House budget by \$4.3 million. MassRivers is promoting two other bills: drought management, and a bill requiring that CSO notifications are made to the public as well as DEP.

<u>Massachusetts Division of Ecological Restoration</u>: (1) With a reorganization of the Division, two open positions will be filled shortly. (2) In response to \$5.7million request for stream continuity funding, DER was able to grant \$750K. *Julia requested that all agencies report grant-based funding this way, to document need.* 

<u>Urban Harbors Institute</u>: Two reports out of UMass Boston of note: *Financing Climate Resilience*: *Mobilizing Resources and Incentives to Protect Boston from Climate Risks* and *Feasibility of Harborwide Barrier Systems: Preliminary Analysis for Boston Harbor*.

North and South Rivers Watershed Association: The town of Marshfield's plastic bag ban is now in place and being implemented.

<u>U.S. Environmental Protection Agency</u>: (1) Region 1 EPA Administrator Alexandra Dunn is ready to meet with constituents from across New England; Regina has been providing her with information about the NEPs, and keeping coastal issues in the forefront. (2) New Assistant Regional Administrator Sean Dixon is the former NY-NJ Harbor River Keeper. (3) The Federal Fiscal Year Budget provides \$600K per NEP, plus a \$1.5M competitive grant program. Several Clean Water Act programs were proposed for no funding in the President's budget, but Congress restored them. FFY19 White House budget puts all at zero funding once again.

<u>MIT Sea Grant</u>: (1) Research results documenting carbon storage by eelgrass are now ready for dissemination; Sea Grant will be presenting to conservation commissions, harbor masters, shellfish wardens, etc., and promoting bylaws and other measures to protect existing eelgrass beds. (2) A new anthropologist/social scientist will be on board soon.

# **Staff Updates: Regional Coordinators**

Regional updates are organized according to the seven action areas of the implementation workplan:

- 1. Gathering data on conditions and trends (DATA)
- 2. Reducing stormwater discharge volumes and pollutant loadings (SW)
- 3. Reducing contamination from wastewater (WW)
- 4. Adapting to/mitigating impacts of climate change (CC)
- 5. Removing barriers to streamflow and tidal flushing (SF)
- 6. Managing invasive species (IS)
- 7. Conducting education and outreach (E&O)

# Gather data on conditions and trends [DATA]

- Upper North Shore
  - O As a result of the extreme cold weather in late December and high tides and storm surge from the coastal nor'easter snowstorm in early January, extensive sediment was ice rafted up on to the Great Marsh marsh platform in selected locations. These areas of continuous sediment ranged in size from a couple acres to nearly fifty acres. In February the Great Marsh Partnership documented the extent of the natural sediment deposition (drone mapped), collected over 150 sediment samples for analysis, and georeferenced sampling sites for future marsh vegetation monitoring at three deposition locations. The sediment thickness ranged between <0.5 cm to 10cm at most of the deposition areas. The full processing of the sediment is nearly complete. The team is awaiting the start of the growing season to evaluate marsh vegetation response. This project is a great opportunity to assess the response of the marsh vegetation to a rare, natural sediment deposition and can be used to evaluate a potential sea level rise management strategy.
  - The spring session of green crab monitoring in both Essex Bay and Plum Island Sound has been completed. Numbers look high for this time of year in Plum Island Sound and close to average in Essex Bay.

#### • Lower North Shore

- Lower North Shore Coastal Acidification Citizen Monitoring: Sampling by citizen scientists is ongoing and the regional coordinator participated in OCA webinars with volunteers
- Salt Marsh Monitoring for Climate Change Impacts: This monitoring program continues to document storm impacts and marsh deposition.
- Three-Year Monitoring Plan: In February, the Shellfish Sanitary Survey was initiated with monthly fecal coliform water sampling with assistance from Division of Marine Fisheries. Releasing drifter with MBTS harbormaster's assistance to examine MBTS effluent drift zone.

#### Metro Boston

- Progress continues on the Boston Harbor Habitat Atlas: Maps are almost complete and the regional coordinator met with ESRI platform engineer to get guidance on Atlas development. Many external partners are engaged to get habitat photos, details for maps, and edit text for the Atlas. A draft is expected by mid-June to present to Atlas review committee.
- <u>Data visualization and science communication workshop</u>: The regional coordinator coordinated a workshop with colleagues from UMCES for May 16-18; registration is currently open.

## South Shore

- <u>Eelgrass loss in Duxbury/Kingston/Plymouth</u>: The regional coordinator organized and hosted a stakeholder meeting in February to discuss proposed approaches for eelgrass monitoring by citizen scientists. Results and recommendations were the annual Eelgrass Symposium hosted by EPA on March 28.
- Horseshoe crab spawning surveys in Duxbury Bay: The regional coordinator is planning and scheduling surveys for the 2018 horseshoe crab monitoring program.
- Anadromous fish run monitoring: In the past several weeks work has been underway to prepare
  for herring counts at six locations on the South Shore. Additionally, the regional coordinator
  participated in a video on training new volunteers to count anadromous fish.

# Cape Cod

- <u>Herring run monitoring:</u> Completed training of volunteer count groups. Counting is underway at about 18 runs Capewide. Recent cold weather may have slowed the runs.
- Cyanobacteria monitoring: Planning is nearly completed for the 2018 monitoring season. Ponds and lakes in Brewster, Chatham and possibly Dennis will be monitored by cyanobacteria. An intern will assist with all monitoring and analysis tasks.

## Reduce stormwater discharge volumes and pollutant loadings [SW]

#### • Lower North Shore

- Greenscapes and LID: Three Greenscapes public events were conducted across Essex County.
   Additionally, Salem Sound Coastwatch (SSCW) hosted a KWC evening with 30 adults. SSCW also coordinated clean ups and monitoring of the Commercial Street rain gardens.
- Adopt-a-Beach Program: SSCW conducted Adopt a Beach Training on 4/17. Another training session is scheduled for 5/9. A series of eight clean ups has been conducted starting 4/16 through 5/19.

## South Shore

 Riverwatch: The regional coordinator analyzed the time series of data from this water quality monitoring program in shellfish growing areas

# Cape Cod

- Cape Cod Stormwater Coalition: The 4/9/18 meeting included a presentation by PeopleGIS on software to manage stormwater systems, review of the EPA's stormwater cost estimator to seek input from towns on cost factors, and update on the draft MOU. Nine towns and 25 people attended. The next meeting on 5/23/18 will include a DEP training session on the Notice of Intent (NOI), discussion of cost-saving measures and other issues.
- o <u>Local governance committee (CRC):</u> The CRC met on 1/26/18; topics included an update on Phase II of the Cape Cod Water Resources Restoration Project, County dredge, Cape Cod

Stormwater Coalition project, and updates from members. A second CRC meeting is planned for 4/26/18; topics will include an MVP (Municipal Vulnerability Preparedness) grant information session, reports from two Cape Cod towns on their MVP grants, Cape Cod Water Resources Project, County Dredge, Stormwater Coalition, and updates from members.

# Adapt to/mitigate impacts of climate change [CC]

# • Upper North Shore

Recent funding will enable continuation of several projects in Great Marsh previously funded by the Hurricane Sandy Resilience grant. Projects include expansion of eelgrass restoration into Plum Island Sound, 5<sup>th</sup> (and final) season of green crab population monitoring for a fifth, and marsh edge erosion surveys in the Great Marsh. MVPC added a boat to its resources in order to facilitate these and other estuarine projects.

# • Lower North Shore

<u>Coastal Resilience</u>: The regional coordinator conducted Municipal Vulnerability Planning (MVP) workshops for the town of Manchester and is currently preparing for similar workshops for the town of Marblehead and is encouraging the towns of Beverly, Danvers, and Nahant to apply.

#### Metro Boston

The regional coordinator participated in various meetings including: draft review and final presentation meeting (1/26) for the UMass Boston Boston Harbor protection study, onboarded into Climate Ready Boston Leaders program on 3/5, to deliver presentation at Northeastern on 6/12; facilitated meeting on 1/22 between Northeastern and Friends of Fort Point Channel to assess restoration potential near mouth of Fort Point Channel, and facilitated meeting on 3/23 between TNC and Northeastern to explore potential for further collaboration on living shorelines

#### · South Shore

 Vegetation response to sea level rise: North and South Rivers Association established a long-term monitoring of vegetation change in salt marshes. Results were presented data to Scituate Selectmen.

# Barriers to streamflow and tidal flushing (SF)

#### Metro Boston

- Rumney Marsh Study: The regional coordinator is working with NSF-funded Northeastern team studying tide gate management in Rumney Marsh, helping draft a stakeholder matrix to help inform where consultation is warranted; project team meets 2-3 times a month
- Ballard Street Tide Gate Project: The regional coordinator prepared and vetted a timeline of
  events/players to understand the stallout of the Ballard Street tide gate project, meeting with
  several municipality and agency representatives over the past few months.

## South Shore

- <u>Streamflow restoration</u>: The regional coordinator worked with Scituate Water Division to update and clarify flow releases. The regional coordinator wrote an article on water savings and streamflow for NSRWA e-news.
- Dam removals: The regional coordinator initiated planning and discussion of monitoring related to Bound Brook. The regional coordinator continues to maintain PIT tagging antennas for Third Herring Brook and submitted a pre-proposal for NOAA grant for the removal of Peterson Pond Dam. In terms of South River the regional coordinator conducted RTK surveys at Temple Streets and reviewed bids for Veterans Memorial Park Dam feasibility work
- Stream crossing prioritization: The regional coordinator assisted the town of Norwell with a proposal to MassDER culvert grant.

#### Cape Cod

o <u>Tidegate inventory</u>: Meetings are being scheduled with municipalities and stakeholders to provide information on the tidegate inventory tool and how it will help in planning and decisionmaking, as well as to solicit additional information. The first meeting is planned with the Town of Truro to discuss the tidegates in the Pamet River system.

# Manage invasive species [IS]

# Upper North Shore

- Since all existing permits for treatment of invasive Phragmites in the Great Marsh communities are set to expire in 2018, the process of re-permitting was begun. A negative determination of applicability from Salisbury (the first community requested) was obtained. Funding is also being sought to continue maintenance level treatments of Phragmites following extensive successful reduction in the areal extent of invasive plant funded by Hurricane Sandy Resiliency grant.
- Additional funding continued culinary research and marketing of green crab was obtained. This
  includes publication of a cookbook and scheduling and hosting of a Green Crab Summit in
  Portland ME. Currently, funding is being sought to produce a documentary on the green crab
  management effort (www.walkercreekmedia.com).

#### Lower North Shore

Coastal Habitat Invasive Species Monitoring: The regional coordinator scheduled Public Citizen Science Training on 5/31. SSCW is also building a custom salt water aquarium for local species

# Conduct education and outreach [E&O]

# • Upper North Shore

- <u>Underwater in Salem Sound Lecture Series</u>: On 4/28 lecture on Phenology and Citizen Science is being hosted by SSCW with the USA National Phenology Network.
- SSCW is working with City of Salem on permitting Collins Cove salt marsh restoration project

#### Metro Boston

- Boston Harbor Ecosystem Network: Steering committee met on Feb 2 and April 5 to plan 3-4 field trips and 2 meetings for this year; also made revisions to final draft of BHEN governance document. The May meeting with feature three speakers for May 3 meeting (USACE, CZM, DEP)
- Public events: Public lectures held on 1/16 (David Sittenfeld/MOS on climate hazard dialogues)
   and February on 2/13 (Marc Albert/NPS on Boston Harbor islands stewardship and science)
- Other events: Hosted third annual Metro Boston high school marine science symposium on 3/9, attended by 275 students (96 of which from Metro Boston region); presenters included 6 organizations active in BHEN; Presented on BHEN and Atlas project to Boston Biodiversity Consortium on 1/17; Attended Boston Harbor Now Working Port symposium on 1/24; and Met with constituents in Winthrop on 1/18 about developing interpretive trail at Belle Isle Marine Ecology Park; a proposal to DCR was submitted

## South Shore

- Watershed stewardship certificate program: Assisted with Mass Audubon NOAA B-WET grant implementation (ecological education for high school teachers and students), prepared to apply for EPA Environmental Education Grant to provide estuarine stewardship certificate program
- Other events: Assisted with proposal for salt marsh monitoring from Jones River Watershed Association, planned for WAA legislative breakfast and attended WAA meetings, planned joint meeting between NEERS and NERRS and chaired CERF conference strategy committee, gave environmental science classes at Notre Dame Academy a lecture on estuarine ecology and water quality, helped students at CSCR prepare for their Coastal Caucus, attended Living Observatory Research Summit, discussed state in-lieu-fee program with new manager, attended webinar on accessing streamflow data online, participated on state Storm Team reporting on damage, wrote proposal to MassBays HE grant program for citizen science green crab trapping project

## • Cape Cod

- The regional coordinator gave presentations on the effects of sea level rise on the mid-Cape's aguifer at a climate change forum in Barnstable and on ponds in Brewster and Chatham;
- The regional coordinator provided herring count training sessions in Sandwich, Dennis, Brewster, Mashpee and other towns.

# **Staff Updates: Central Staff**

#### **Executive Director**

# Fundraising & Program Management

- February 2, met with Aisling O'Shea from the Division of Fisheries and Wildlife regarding their in-lieu-fee agreement with the Army Corps, and potential for leveraging those funds to implement designs and plans funded by MassBays in coastal communities.
- March 2, participated in a focus group to review the Northeastern University Marine Science Center's work as the MassBays Regional Service Provider for Metro Boston.
- April 3, Met with Steve Kirk of The Nature Conservancy for a Management Committee orientation. He has been nominated as TNC's representative.
- April 13, attended Environmental Business Council forum at which the Sustainable Solutions Lab at UMass Boston described a new report focused on financing climate adaptation in Boston and cutting edge financing models around the country.

# National Estuary Program Coordination

- Through March 6, participated in multiple planning calls for the annual Spring NEP meeting held at EPA Headquarters in Washington DC.
- February 20 and 22, participated in national conference calls regarding NEP and Association of National Estuary Programs (ANEP) communications goals and strategies.
- March 27, began work with a committee to plan the Fall NEP technical transfer meeting, to be hosted by San Francisco Bay Partnership.

# CCMP & Monitoring

- February 28 (Pam) and March 1 (Prassede), attended a UMaryland Center for Environmental Science (UMCES) workshop to develop an "ecoreport card" for the Assabet, Sudbury, and Concord Rivers.
- March 28, met with The Nature Conservancy's Jon Kachmar re: environmental justice actions and opportunities in Boston.
- March 14-15, attended the annual meeting of NEPs at EPA in Washington DC and presented on a panel to describe our monitoring plan approach.
- April 6, convened Biological Condition Gradient consultant Emily Shumchenia and staff from the University of Maryland Center for Environmental Studies on a conference call to begin the integration of BCG into web-based State of the Bays reporting. Thanks to EPA for funding to begin planning with UMCES on an ecoreport card for MassBays; we await word from another section of EPA for implementation funds.
- March 20, presented a guest lecture at Brandeis University in the morning, and later served on a
  panel to respond to presentations by UMass Boston graduate students, both regarding the
  application of citizen science data to environmental policy and management.
- April 24, participated in a webinar: BIG DATA! Opportunities and Pitfalls for using Public Environmental Data, presented by Exponent Consulting.

## Regional Collaboration

- February 22, participated in a quarterly Board of Directors conference call for NERACOOS (Northeast Regional Association for Coastal and Ocean Observing Systems).
- Joined a subcommittee to help plan the 2018 New England Ocean Science Education Collaborative Ocean Literacy Summit (scheduled for November 16-18 at UMass Boston).

#### Tide Gate Inventory

- March 6, convened CZM and MassBays Regional Coordinators via conference call to review draft materials for tide gate outreach to municipalities.
- April 10, presented tide gate inventory findings and recommendations to CZM staff in preparation for Regional Coordinators' meetings with municipal staff regarding tide gate management.
- April 11, made a site visit to Mayo Creek, where MassBays funded an investigation of potential marsh restoration via increased tidal flushing. The town may propose a new tide gate there.

#### **Staff Scientist**

- <u>MassBays Healthy Estuaries Grants</u>: Eight proponents were invited to submit a full proposal for consideration for funding. Five projects have been recommended for funding. Announcements will be made in the coming weeks with the intent to develop scopes and contracts by mid-May.
- <u>Science and Technical Advisory Committee</u>: A meeting of STAC is planned for sometime in late May (currently scheduling). Agenda will focus on presentation by Northeastern University of the findings of the EDA 2.0 and an ensuing discussion on how this will tie into the Biological Condition Gradient framework currently being developed by EPA and MassBays.
- EDA2.0 and Biological Condition Gradient: Northeastern University submitted the final report of the EDA 2.0 at the end of March and report is currently being reviewed and will be distributed to STAC for discussion at the next meeting. EPA has provided additional funding to support the development of a BCG framework for MassBays with Emily Shumchenia. A scope has been developed which will be shared with STAC in the coming weeks.
- <u>Eelgrass mapping in DKP</u>: Work is continuing on the eelgrass project in DKP. Supplemental, funds provided by EPA in 2017 are being used to support additional mapping (conducted in summer/fall 2017), a stakeholder meeting to discuss proposed citizen monitoring protocols (February 2018), development of a monitoring protocol and training of volunteers scheduled to take place in August. In addition, MassBays is working with SeaTrac Systems to conduct real-time, continuous water quality monitoring in DKP over the summer as part of the effort to identify causes of eelgrass loss in this embayment.
- Coastal and Ocean Acidification: MassBays has continued working on various efforts on OCA, primarily: 1) participation in a series of technical webinars organized by EPA to discuss progress on OCA monitoring in eight NEPs around the country; 2) participation in efforts lead by NECAN to inform managers on OCA and share scientific information; and 3) continue to work with UMass Boston to finalize development of the coastal acidification system to be deployed in Duxbury Harbor. MassBays and EPA visited the lab earlier this month to discuss progress.

**Next Management Committee Meeting** 

Wednesday, July 25th, 2018